

AFN Satellite System Set Up

For Novices

So you're thinking about buying an AFN satellite decoder. Here's some helpful advice from the AFN Network Operations Center staff.

Before You Buy

Before you purchase the equipment, check to make sure you can mount the satellite dish in a location that will allow you to receive the satellite signal. In the regions of Germany, Benelux and Italy this means a clear view of the sky at 170 to 180 degrees azimuth (180 degrees is due south.) and an elevation of 30 degrees (about 1/3 of the way up from the horizon. The view must be unobstructed because the satellite signal will not go through buildings or trees.

What To Buy

Once you are reasonably certain you can mount a satellite dish where it can receive the satellite signal, you will need to get the proper equipment.

1. A satellite dish with a diameter of at least 80 centimeters.
2. A Scientific Atlanta, Power Vu receiver/decoder from the exchange or a used one from another authorized user.
3. An American-standard television.
4. Enough coaxial, satellite cable to connect the dish to the receiver. The equipment is available at AAFES or most store that sell electronics.
5. Either a coaxial cable to connect the TV OUT from the satellite receiver to the cable input on your television or RCA cables to connect the Video/Audio connections from the satellite receiver to the same type inputs on your television. This means you will have to switch to the video or auxiliary input on your television to view AFN.

Turn The Decoder On

The first thing you want to do, when you get the satellite receiver, is request an authorization. You will need the TID and UA numbers from the back of the Satellite Receiver, then get on line at www.pvconnect.net. On the main page you will see two satellite receivers, the one on the left says "authorize receiver." Click on this one and follow the directions to request your authorization.

Set Up The Decoder

Once the satellite receiver is connected to your television you can make sure the receiver settings are correct.

- On the newer receivers, Models 9834 & 9835, select the MENU button.
- From the Main Menu enter the Preset LNB
- Make sure the settings are as follows:
 - Active Preset 1
 - Downlink 10.775
 - System Rate 28
 - FEC Auto

- Polar H
- Net ID 6
- LNB Pwr 18
- LO Freq 1 9.75
- LO Freq 2 Not used (it can say any number or none)
- Crossover Not used (it can say any number or none)
- LO Select LO1

Once you have changed the settings DO NOT hit the Activate button, just exit and save.

- On the older receivers, models DV3 & D9234, select the MENU button.
- From the Main Menu select the Receiver Status
- From the Receiver Status select the Receiver Setup
- Make sure the settings are as follows:
 - Freq Mode Downlink
 - Frequency 10.77500
 - L.O. Freq #1 9.750
 - L.O. Freq #2 Not used (it can say any number or none at all)
 - Crossover Not used (it can say any number or none at all)
 - Polarization H (Fixed)
 - FEC Rate $\frac{3}{4}$
 - Symbol Rate 28.0000
 - Net ID 6
 - Find OFF
 -

Once you have made these changes just exit and save.

Set Up The Dish

Now that the settings are correct you are ready to setup the satellite dish. The dish has to be solidly mounted so it cannot move and there are numerous options for accomplishing this. You can get mounting hardware to fix the dish to walls, to balconies, to posts and poles. You can get poles that can be cemented into the ground or tripods that can set on the ground or on a balcony. Mount the dish on something solid, if you get a tripod, use bricks, rocks or sandbags to weight the tripod down so it will not move.

The cable coming from the satellite dish must enter the home through a hole or through a window sill or doorway. Do not crush or kink coaxial cable. If you bring the cable through a window or a doorway, use a flat cable. (This is a short piece of cable, usually 8 to 12 inches, with female connections on both ends. It is designed to bend and be crushed in these situations). The cable is connected from the LNB (the feed horn) on the satellite dish to the flat cable on the outside. Then use another cable to connect from the flat cable on the inside to Satellite input on the satellite receiver.

Pointing The Dish

Once the dish is mounted and the connections are made, you are ready to align your dish. You begin with the azimuth (compass direction) and elevation for your location. Select that information from the table below:

Germany:	<u>Azimuth</u>	<u>Elevation</u>		<u>Azimuth</u>	<u>Elevation</u>
Ansbach	176.06	33.54	Babenhausen	174.46	33.00
Bad Aibling	177.96	35.39	Bamberg	176.41	33.15
Bad Kreuznach	173.87	32.97	Baumholder	173.39	33.10
Bitburg	172.16	32.79	Darmstadt	174.42	32.52
Frankfurt	174.65	32.40	Friedberg	174.34	32.31
Garmisch	176.98	35.62	Giessen	174.30	32.14
Grafenwoehr	177.85	33.30	Hanau	174.45	32.45
Heidelberg	174.21	33.34	Hohenfels	177.76	33.63
Illesheim	175.96	33.38	Kaiserslautern	177.74	33.25
Kitzingen	175.92	33.17	Mainz-Kastel	173.88	32.49
Mannheim	174.02	33.28	Schweinfurt	175.75	32.59
Stuttgart	175.03	34.25	Wiesbaden	173.86	32.45
Wuerzburg	175.87	33.16	Vilseck	177.76	33.36

Belgium:	<u>Azimuth</u>	<u>Elevation</u>		<u>Azimuth</u>	<u>Elevation</u>
Brussels	170.32	31.54	SHAPE	170.13	31.44

Italy:	<u>Azimuth</u>	<u>Elevation</u>		<u>Azimuth</u>	<u>Elevation</u>
Aviano	177.92	37.03	La Maddalena	174.35	42.31
Livorno	175.38	39.94	Naples	180.25	43.16
Sigonella	186.78	46.29	Vicenza	177.27	37.78

Netherlands	<u>Azimuth</u>	<u>Elevation</u>		<u>Azimuth</u>	<u>Elevation</u>
The Hague	170.74	29.89	Maastricht	172.06	31.68
Schinnen	172.29	31.65			

Use a compass to select a landmark at the proper azimuth for your location. Then point the dish, as accurately as you can, at that landmark. Set the elevation using the hash marks and pointer on the dish mount. This is only a rough dish pointing. Now its time to fine tune the pointing.

Fine Tuning

On the satellite receiver select the MENU. From the Main Menu select Dish Setup on the newer receivers or Dish Pointing on the older receivers. Here you should be reading a Signal Level on the newer receivers, a Signal Strength on the older receivers. You will use these readings to guide the fine adjustment of your dish. If you cannot watch the TV while you adjust the dish, have another person watch the TV and call out the readings to you. Use cell phones if necessary. Loosen the mount just enough so you can move the dish in TINY increments. Grab the dish and move it just slightly to the left or right. The Signal Level should either go up or down. If it is going down, move the dish in the other direction. If it is going up, you are moving in the right direction. Adjust the dish in small increments until the Signal Level peaks. You will invariably move past the peak and have to back up to it. Tighten the mount in this position and then do the same for the elevation, adjusting the dish up or down as necessary. At this point you should "Lock" to

the satellite. It will say Lock **Yes** on the newer decoders or **Lock+Sig** on the older decoders and the decoder will begin to show a Signal Quality.

Start Viewing

You are now ready to start viewing AFN. Exit the menu and select channel 8, which is the Pentagon Channel. (The Pentagon Channel can be viewed without an authorization) This is useful to verify the system is operational. Even if the system is authorized, it is not uncommon for it to say “No Authorization” or “Needs Authorization Key” for a half-hour after you have locked on while it awaits an authorization update.

If more than 24 hours has elapsed since you requested your authorization and the system refuses to update for more than an hour, you should call the AFN trouble number for assistance.

In Germany – 0621-46085 444, or DSN 389-4444

Outside Germany - (049) 621 46085 444.

In Italy – 0444-718228 or DSN 634-8228

You will reach one of the AFN Network Operations Centers where staff members are available 24 hours a day to provide assistance with set-up and troubleshooting issues.

What's On TV?

Check www.myafn.net for the current and future programming on all the AFN channels. Remember to set the time on this site to your time zone.